

# Work Order ID 77377

December-06-11 1:14:59 PM

**\*77377\***

Page 1

Item ID: D3391-025

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Aft Tube Assembly

Start Date: 06/12/2011 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 13/12/2011 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: M.C.J

Date: 11/12/08

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC.(Y/N):

Date:

Stop **\*NR2\***

| Sequence ID/<br>Work Center ID | Operation<br>Description  | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| <b>Draw Nbr</b>                | <b>Revision Nbr</b>   |                      |         |        |              |               |               |                  |                |
| D3391                          | 1   |                      |         |        |              |               |               |                  |                |
| 100                            | MORI SEIKI CNC LATHE LARGE                                      | 0.00                 |         |        |              |               |               |                  |                |
| <b>*100*</b>                   |   |                      |         |        |              |               |               |                  |                |
| Mori Seiki                     | Memo  | 0.00                 |         |        |              |               |               |                  |                |
| Mori Seiki CNC Lathe Large     | Turn as per Folio FA599 Rev: <u>H</u> & Dwg D3391 Rev: <u>I</u> |                      |         |        |              |               |               |                  |                |
|                                | ***scribe batch # on fwd end at 90 degree***                    |                      |         |        |              |               |               |                  |                |
| 110                            | QC2- Inspect parts off machine FAI/FAIB                         | 0.00                 |         |        |              |               |               |                  |                |
| <b>*110*</b>                   |   |                      |         |        |              |               |               |                  |                |
| QC                             | Memo  | 0.00                 |         |        |              |               |               |                  |                |
| Quality Control                |   |                      |         |        |              |               |               |                  |                |
| 111                            | QC8- Inspect parts - second check                               | 0.00                 |         |        |              |               |               |                  |                |
| <b>*111*</b>                   |   |                      |         |        |              |               |               |                  |                |
| QC                             | Memo  | 0.00                 |         |        |              |               |               |                  |                |
| Quality Control                | ***INSPECT INSIDE BORE***                                       |                      |         |        |              |               |               |                  |                |

M.M.L 11/12/08

M.M.L 11/12/08

and 11/12/08

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

# Work Order ID 77377

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Item ID: D3391-025 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Aft Tube Assembly  
 Start Date: 06/12/2011 Start Qty: 1.00 **\*1\*** Cust Item ID:  
 Required Date: 13/12/2011 Req'd Qty: 1.00 **\*1\*** Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

| Sequence ID/<br>Work Center ID | Operation<br>Description   | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 120                            |  | 0.00                 |         |        |              |               |               |                  |                |
| <b>*120*</b>                   | HAAS CNC VERTICAL MACHINING #1   |                      |         |        |              |               |               |                  |                |
| HAAS 1                         | Memo   | 0.00                 |         |        |              |               |               |                  |                |
| HAAS CNC vertical machine #1   | 1-Machine as per Folio FA 599 Rev: <u>AA</u> & Dwg D3391 Rev: <u>I</u> <i>enl 11/12/11</i> |                      |         |        |              |               |               |                  |                |
|                                | 2-Deburr   |                      |         |        |              |               |               |                  |                |
| 130                            |  | 0.00                 |         |        |              |               |               |                  |                |
| <b>*130*</b>                   | QC2- Inspect parts off machine FAI/FAIB  |                      |         |        |              |               |               |                  |                |
| QC                             | Memo   | 0.00                 |         |        |              |               |               |                  |                |
| Quality Control                |  |                      |         |        |              |               |               |                  |                |
| 140                            |  | 0.00                 |         |        |              |               |               |                  |                |
| <b>*140*</b>                   | QC8- Inspect parts - second check  |                      |         |        |              |               |               |                  |                |
| QC                             | Memo   | 0.00                 |         |        |              |               |               |                  |                |
| Quality Control                | ***INSPECT INSIDE BORE***  |                      |         |        |              |               |               |                  |                |

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

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**Accept**

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

**Item Name:** Aft Tube Assembly

Stop \*NS2\*

**Start Date:** 06/12/2011 **Start Qty:** 1.00

**\* 1 \***

**Cust Item ID:**

**Required Date:** 13/12/2011      **Req'd Qty:** 1.00

**\* 1 \***

**Customer:**

**Reference:**

Run Start \*NR1\*

**Approvals:**      **Process Plan:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Tooling:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Stop \*NR2\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

**Date:** \_\_\_\_\_ **SPC (Y/N):** \_\_\_\_\_ **Date:** \_\_\_\_\_

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

150

0.00

**\*150\***

## Skidtubes

0.00

## Skidtubes

## Memo

## Skidtubes

1-Drill ( PILOT HOLE) aft cap holes per Dwg D3391 using DT8803

160

0.00

**\*160\***

## BENDING MACHINE - SKIDTUBES

0.00

CNC Bend 1

## Memo

## CNC Delta 100 Bender

Form as per Dwg D3391 Using Bend Prog 3391025

170

QC5- Inspect part completeness to step on W/O

0.00

**\*170\***

QC

## Memo

0.00

## Quality Control

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

**Work Order ID 77377****\*77377\***

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Item ID: D3391-025

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Aft Tube Assembly

Start Date: 06/12/2011 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 13/12/2011 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***  
Stop **\*NR2\***

| Sequence ID/<br>Work Center ID | Operation<br>Description  | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 180                            |   | 0.00                 |         |        |              |               |               |                  |                |
| <b>*180*</b>                   | Skidtubes   |                      |         |        |              |               |               |                  |                |
| Skidtubes                      | <b>Memo</b>   | 0.00                 |         |        |              |               |               |                  |                |
| Skidtubes                      | 1-Open Aft cap pilot hole to .208" as per Dwg D3391   |                      |         |        |              |               |               |                  |                |
|                                | 2-Drill float bag holes using DT8809 as per Dwg D3391(Holes marked "A" Only.                                    |                      |         |        |              |               |               |                  |                |
|                                | 3-Drill wearplate holes as per Dwg D3391 using DT8878(Mid Tube) & DT8217<br>Wearplate Jig .                     |                      |         |        |              |               |               |                  |                |
|                                | *****Do Not Open To Finished Size*****  |                      |         |        |              |               |               |                  |                |
|                                | 4-Drill Wearshoe holes as per DWG D3391 using DT8939 locating from 2<br>previously drilled aft wearplate holes. |                      |         |        |              |               |               |                  |                |
|                                | 5-Open wearplate holes to 0.250" and c'bore as per dwg D3391  |                      |         |        |              |               |               |                  |                |
|                                | 6-Open up all wearshoe , wearplate to 0.297"and float bag holes to 0.328" as per<br>Dwg D3391.                  |                      |         |        |              |               |               |                  |                |
|                                | 7-Deburr  |                      |         |        |              |               |               |                  |                |

85  
12-01-0385  
12-01-04

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries



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**\*N900040100\***

Setup Start \*NS1\*

Stop \*NS2\*

**Start Date:** 06/12/2011      **Start Qty:** 1.00

**\* 1 \***

**Cust Item ID:**

**Required Date:** 13/12/2011      **Req'd Qty:** 1.00

**\* 1 \***

**Customer:**

**Reference:**

Run Start \*NR1\*

**Approvals:** \_\_\_\_\_ **Process Plan:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Tooling:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Stop \*NR2\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

190 QC5- Inspect part completeness to step on W/O

0.00

\*190\*

0.00 Sizlo404

QC Memo

0.00

## Quality Control

200 Chemical Conversion Coat per QSI005 4.1

0.00

**\*200\***

Ac 12/01/04

HandFinish Memo

0.00

## Hand Finishing

210 QC3- Inspect Part Finish

0.00

**\*210\***

12-01-05

QC Memo

0.00

## Quality Control

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

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Item ID: D3391-025

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Aft Tube Assembly

Start Date: 06/12/2011 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 13/12/2011 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

| Sequence ID/<br>Work Center ID | Operation<br>Description  | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 220                            |   | 0.00                 |         |        |              |               |               |                  |                |
| <b>*220*</b>                   | Skidtubes   |                      |         |        |              |               |               |                  |                |
| Skidtubes                      | Memo  | 0.00                 |         |        |              |               |               |                  |                |
| Skidtubes                      | Instal spacers as per dwg D3391<br>A/R Magnabond 6398 Batch: <u>117870</u><br>exp. date: <u>12-08</u><br>cure time 12hrs as per QSI0015 |                      |         |        |              |               |               |                  |                |
| 230                            | QC5- Inspect part completeness to step on W/O   | 0.00                 |         |        |              |               |               |                  |                |
| <b>*230*</b>                   |   |                      |         |        |              |               |               |                  |                |
| QC                             | Memo  | 0.00                 |         |        |              |               |               |                  |                |
| Quality Control                |   |                      |         |        |              |               |               |                  |                |
| 235                            | Pressure Wash per QSI005 4.3  | 0.00                 |         |        |              |               |               |                  |                |
| <b>*235*</b>                   |   |                      |         |        |              |               |               |                  |                |
| HandFinish                     | Memo  | 0.00                 |         |        |              |               |               |                  |                |
| Hand Finishing                 | AND REALODINE AS PER PAR09-043  |                      |         |        |              |               |               |                  |                |

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

# Work Order ID 77377

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Item ID: D3391-025 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Aft Tube Assembly  
 Start Date: 06/12/2011 Start Qty: 1.00 **\*1\*** Cust Item ID:  
 Required Date: 13/12/2011 Req'd Qty: 1.00 **\*1\*** Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

| Sequence ID/<br>Work Center ID | Operation<br>Description                     | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 240                            | White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum | 0.00                 |         |        |              |               |               |                  |                |
| <b>*240*</b>                   |  |                      |         |        |              |               |               |                  |                |
| Powdercoat                     |  | 0.00                 |         |        |              |               |               |                  |                |
| Powder Coating                 |  |                      |         |        |              |               |               |                  |                |
|                                | Memo   |                      |         |        |              |               |               |                  |                |
|                                | START TIME: 10:40                            |                      |         |        |              |               |               |                  |                |
|                                | OVEN TEMPERATURE: 320 OF                     |                      |         |        |              |               |               |                  |                |
|                                | FINISH TIME: 11:10                           |                      |         |        |              |               |               |                  |                |
| 250                            | QC3- Inspect Part Finish                     | 0.00                 |         |        |              |               |               |                  |                |
| <b>*250*</b>                   |  |                      |         |        |              |               |               |                  |                |
| QC                             |  | 0.00                 |         |        |              |               |               |                  |                |
| Quality Control                | Memo   |                      |         |        |              |               |               |                  |                |
| 260                            | HandFinishing                                | 0.00                 |         |        |              |               |               |                  |                |
| <b>*260*</b>                   |  |                      |         |        |              |               |               |                  |                |
| HandFinish                     |  | 0.00                 |         |        |              |               |               |                  |                |
| Hand Finishing                 | Memo   |                      |         |        |              |               |               |                  |                |
|                                | 1-Install inserts as per Dwg D3391           |                      |         |        |              |               |               |                  |                |
|                                | 2-Install Aft Cap as per Dwg D3391           |                      |         |        |              |               |               |                  |                |
|                                | A/R Sikaflex-241/-291 M119508                |                      |         |        |              |               |               |                  |                |
|                                | Sikaflex expiry date: 12/08                  |                      |         |        |              |               |               |                  |                |
|                                | 3- INSTALL WEARPLATES AS PER DWG             |                      |         |        |              |               |               |                  |                |

1x0m-1 12/01/10

1 d 12/01/19

1 d 12/01/19

# Dart Aerospace Ltd

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

# Work Order ID 77377

December-06-11 1:14:59 PM

**\*77377\***

Page 8

Item ID: D3391-025 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Aft Tube Assembly  
 Start Date: 06/12/2011 Start Qty: 1.00 **\*1\*** Cust Item ID:  
 Required Date: 13/12/2011 Req'd Qty: 1.00 **\*1\*** Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

| Sequence ID/<br>Work Center ID                | Operation<br>Description                                     | Set Up/<br>Run Hours | Tool ID | Tool #                         | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp                         |
|---|--|----------------------|---------|--------------------------------|--------------|---------------|---------------|------------------|--|
| 270<br><b>*270*</b><br>QC<br>Quality Control  | QC5- Inspect part completeness to step on W/O<br><br>Memo    | 0.00<br>0.00         |         | 8 12/6/12                      |              |               |               |                  |  |
| 280<br><b>*280*</b><br>Packaging<br>Packaging | Identify as per dwg & Stock Location: <u>W/O</u><br><br>Memo | 0.00<br>0.00         |         | D412-742-043/137541<br>1379104 |              |               |               |                  | xi d M 12/10/19                        |
| 290<br><b>*290*</b><br>QC<br>Quality Control  | QC21- Final Inspection - Work Order Release<br><br>Memo      | 0.00<br>0.00         |         |                                |              |               |               |                  | 12/1/23 [Signature]<br>R 1201-20<br>CI |

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries



December-06-11 1:15:02 PM

**Work Order ID:** 77377

**\*77377\***

**Parent Item:** D3391-025

**\*D3391-025\***

**Parent Item Name:** Aft Tube Assembly

**Start Date:** 06/12/2011

**Required Date:** 13/12/2011

**Start Qty: 1.00**

**Required Qty: 1.00**

|                  |                       |          |                            |     |                 |
|------------------|-----------------------|----------|----------------------------|-----|-----------------|
| <b>Comments:</b> | IPP Rev B             | 06-02-07 | ECN773 dwg rev. D          | EC  |                 |
|                  | IPP Rev:C             | 06-03-28 | Update Manuf. Instructions | JLM |                 |
|                  | IPP rev D             | 07.03.20 | revF dwg                   | EC  |                 |
|                  | IPP rev E             | 07.11.07 | rev G dwg ecn 1053p        | EC  | verified by: DD |
|                  | IPP Rev:F             | 07-11-13 | ECN 1056                   | DD  | verified by: EC |
|                  | IPP Rev:G             | 08-09-10 | revH as per dwg            | DD  | verified by:EC  |
|                  | 11.11.14 AS PER REV.I | DD       | verified by:JLM            |     | IPP Rev:H       |

| Component Item ID/<br>Item Name          | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Unit<br>Seq ID | Measure | Qty on<br>Hand  | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status |
|--|------------------------|---------------|-------------|---------------------|------------------|----------------|---------|-----------------|-------------|--------------|---------------|----------------|--------|
| D4095-047                                |                        | Manufactured  | No          |                     |                  | 260            | Each    | 1.0000          | 1           | 1            |               |                |        |
| <b>*D4095-047*</b><br>Wearpad Assembly   |                        |               |             |                     |                  |                |         |                 |             |              |               |                |        |
|  |                        |               |             | <u>Location</u>     |                  | <u>Loc Qty</u> |         | <u>Loc Code</u> |             |              |               |                |        |
|  |                        |               |             | FP002               |                  | 1              |         |                 |             |              |               |                |        |
|  |                        |               |             | 76208               |                  | 1              |         |                 |             |              |               |                |        |
| D4095-049                                |                        | Manufactured  | No          |                     |                  | 260            | Each    | 3.0000          | 1           | 1            |               |                |        |
| <b>*D4095-049*</b><br>Wearpad Assembly   |                        |               |             |                     |                  |                |         |                 |             |              |               |                |        |
|  |                        |               |             | <u>Location</u>     |                  | <u>Loc Qty</u> |         | <u>Loc Code</u> |             |              |               |                |        |
|  |                        |               |             | FP002               |                  | 3              |         |                 |             |              |               |                |        |
|  |                        |               |             | 76217               |                  | 3              |         |                 |             |              |               |                |        |
| D6014-090                                |                        | Manufactured  | No          |                     |                  | 100            | Each    | 12.0000         | 1           | 1            |               |                |        |
| <b>*D6014-090*</b><br>ALUMINUM EXTRUSION |                        |               |             |                     |                  |                |         |                 |             |              |               |                |        |
|  |                        |               |             | <u>Location</u>     |                  | <u>Loc Qty</u> |         | <u>Loc Code</u> |             |              |               |                |        |
|  |                        |               |             | LG                  |                  | 12             |         |                 |             |              |               |                |        |
|  |                        |               |             | 66179               |                  | 12             |         |                 |             |              |               |                |        |

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

# Picklist Print

December-06-11 1:15:02 PM

Work Order ID: 77377

**\*77377\***

Parent Item: D3391-025

**\*D3391-025\***

Parent Item Name: Aft Tube Assembly

Start Date: 06/12/2011

Required Date: 13/12/2011

Start Qty: 1.00

Required Qty: 1.00

D3670-4-200

Manufactured No

230

Each

63.0000

4

4

**\*D3670-4-200\***

SPACER

\*\*

27 12-01-05

Location

Loc Qty

Loc Code

LG001

63

72851

63

x4

D2646

Manufactured No

270

Each

207.0000

1

1

**\*D2646\***

Aft Cap

\*\*

12/01/19

Location

Loc Qty

Loc Code

FP002

190

73294

2

73825

188

x1

FP004

8

68280

5

70945

1

71070

2

FP005

4

71038

4

FP006

5

62678

5

D3672-1

Manufactured No

270

Each

1,178.000

2

2

**\*D3672-1\***

Phenolic Washer

\*\*

12/01/19

Location

Loc Qty

Loc Code

FP

414

66821

414

x2

ST074

764

72229

264

76277

500

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

# Picklist Print

December-06-11 1:15:02 PM

Page 3

Work Order ID: 77377

**\*77377\***

Parent Item: D3391-025

**\*D3391-025\***

Parent Item Name: Aft Tube Assembly

Start Date: 06/12/2011

Required Date: 13/12/2011

Start Qty: 1.00

Required Qty: 1.00

ALS4-1032-130

Purchased

No

260

Each

2,176.000

14

14

**\*AI S4-1032-130\***

Insert

\*\*

12/01/11

Location

Loc Qty

Loc Code

ST280

1976

119084

1976

ST281

200

119632

200

ALS4-1032-225

Purchased

No

270

Each

1,724.000

8

**\*AI S4-1032-225\***

Insert

\*\*

12/01/11

(Qty 12) (P120111)

Location

Loc Qty

Loc Code

ST281

1724

108696

199

110768

62

118386

858

118966

605

AN3C4A

Purchased

No

270

Each

2,382.000

6

**\*AN3C4A\***

BOLT

\*\*

12/01/11

Location

Loc Qty

Loc Code

ST350

2382

117313

2

117688

5

117872

10

118112

16

118451

2

118838

826

119328

521

119749

1000

12/01/11

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

# Picklist Print

December-06-11 1:15:02 PM

Page 4

Work Order ID: 77377

**\*77377\***

Parent Item: D3391-025

**\*D3391-025\***

Parent Item Name: Aft Tube Assembly

Start Date: 06/12/2011

Required Date: 13/12/2011

Start Qty: 1.00

Required Qty: 1.00

AN3C5A

Purchased

No

270

Each

1,278.000

4

4

**\*AN3C5A\***

Bolt

\*\*

u 12/06/11

Location

Loc Qty

Loc Code

FP

7

115835

7

ST350

1271

116419

28

117343

17

117764

49

117872

2

118451

175

119127

500

119749

500

u4

AN960C10L

NAS1149C0332

Purchased

No

270

Each

0.0000

10

10

**\*AN960C10I \***

washer

\*

\*\*

1119736 (10) u 12/06/11

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries



|  |               |                             |
|--|---------------|-----------------------------|
| <b>DART AEROSPACE LTD</b>                |               | <b>Work Order:</b> 77377    |
| <b>Description:</b> Float Skidtube (412) |               | <b>Part Number:</b> D3391-3 |
| <b>Inspection Dwg:</b> D3391             | <b>Rev:</b> H | <b>Page 1 of 1</b>          |

### FIRST ARTICLE INSPECTION CHECKLIST

| Drawing Dimension    | Tolerance | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|----------------------|-----------|------------------|--------|--------|----------------------|----------|
| <b>Lathe Section</b> |           |                  |        |        |                      |          |
| 14.000               | +/-0.010  | 14.00            | ✓      |        | tape                 | MM-L-02  |
| 3.500                | +/-0.010  | 3.495            | ✓      |        | vern                 | CWC-08   |
| 88.93                | +/-0.030  | 88.930           | ✓      |        | tape                 | MM-L-02  |
| Ø3.200               | +/-0.010  | 3.202            | ✓      |        | vern                 | CWC-08   |
| 88.93                | +/-0.030  | 88.930           | ✓      |        | tape                 | MM-L-02  |
| Ø3.750               | +/-0.010  | 3.750            | ✓      |        | vern                 | CWC-08   |
| 30° x 160" chamfer   | +/-0.010  | 30x160"          | ✓      |        | ll                   |          |

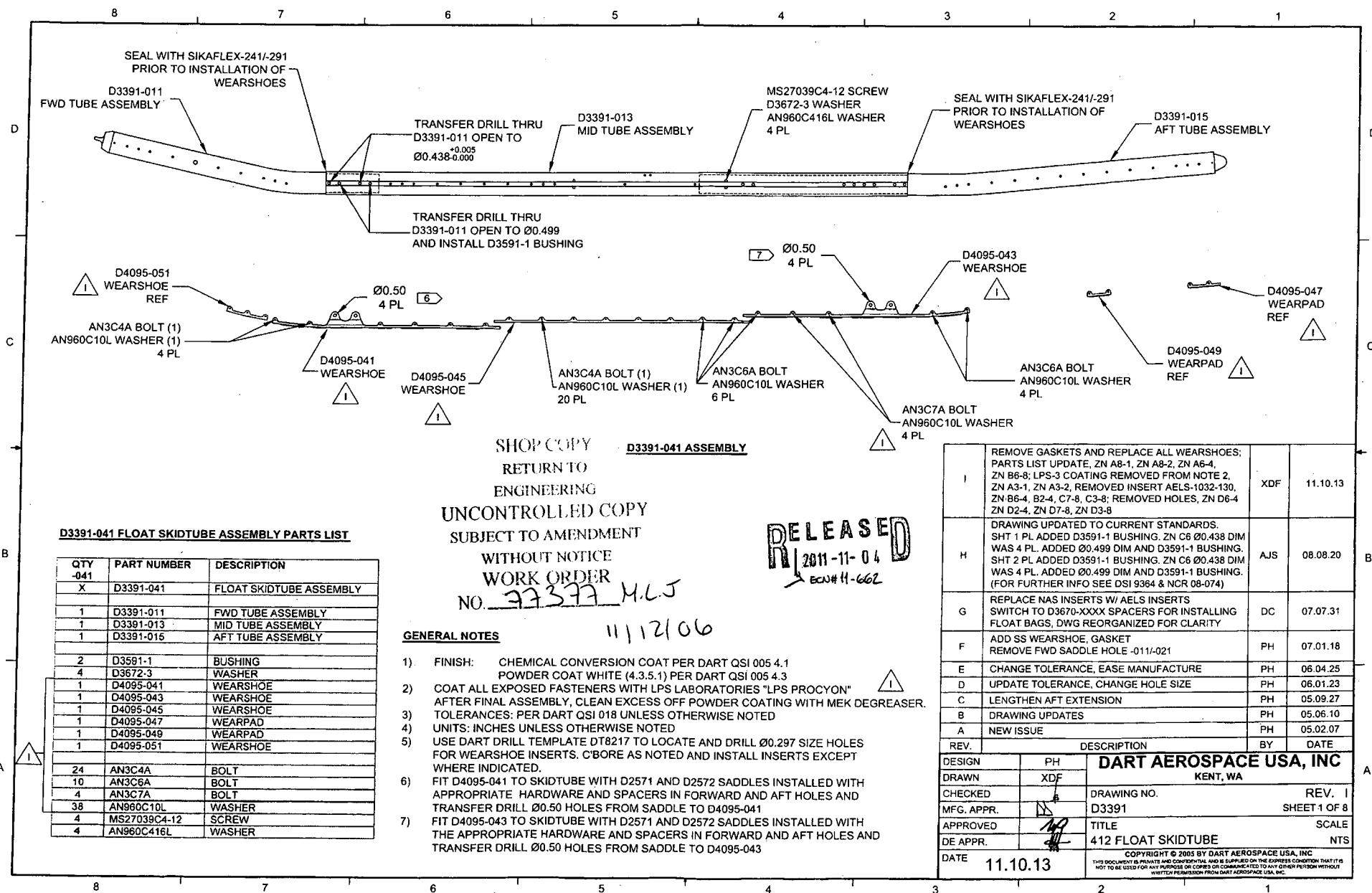
|                          |                       |
|--------------------------|-----------------------|
| <b>Measured by:</b> MM-L | <b>Date:</b> 11/12/07 |
| <b>Audited by:</b> amf   | <b>Date:</b> 11/12/11 |

|                     |               |        |   |  |              |  |
|---------------------|---------------|--------|---|--|--------------|--|
| <b>HAAS Section</b> |               |        |   |  |              |  |
| 1.526               | +0.000/-0.030 | 1.570  | — |  | Vern ML-06   |  |
| 7.500               | +/-0.010      | 7.500  | — |  | "            |  |
| 27.750              | +/-0.010      | 27.750 | — |  | M-tape ML-04 |  |
| 31.750              | +/-0.010      | 31.750 | — |  | "            |  |
| 35.250              | +/-0.010      | 35.250 | — |  | "            |  |
| 3.300               | +/-0.010      | 3.291  | — |  | Vern ML-06   |  |
| 0.200               | +/-0.010      | .200   | — |  | "            |  |
| 3.520               | +/-0.010      | 3.572  | — |  | "            |  |
| 0.687               | +0.010/-0.000 | .687   | — |  | "            |  |
| R0.062              | +/-0.010      | R.062  | — |  | R-L          |  |
| Ø0.484              | +0.005/-0.001 | Ø.488  | — |  | Vern ML-06   |  |

|                         |                       |
|-------------------------|-----------------------|
| <b>Measured by:</b> amf | <b>Date:</b> 11/12/11 |
| <b>Audited by:</b> B.A  | <b>Date:</b> 11/12/13 |

| Rev | Date     | Change                                     | Revised by | Approved |
|-----|----------|--|------------|----------|
| A   | 06.04.24 | New Issue P/O D3391-015/-025               | KJ/JLM     |          |
| B   | 06.06.19 | Dwg revision update                        | KJ/JLM     |          |
| C   | 07.04.20 | Ø0.208 dimension removed                   | KJ/JLM     |          |
| D   | 07.09.06 | 0.400 dimension removed                    | KJ/JLM     |          |
| E   | 07.11.23 | Dwg Rev. updated                           | KJ/EC/DD   |          |
| F   | 09.04.27 | Dimensions updated per Rev H and NCR09-028 | KJ/JLM     |          |
| G   | 09.11.16 | Dimension 0.200 removed                    | KJ         |          |
| H   | 11.06.21 | Dimension 44.995 removed                   | KJ         |          |





| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

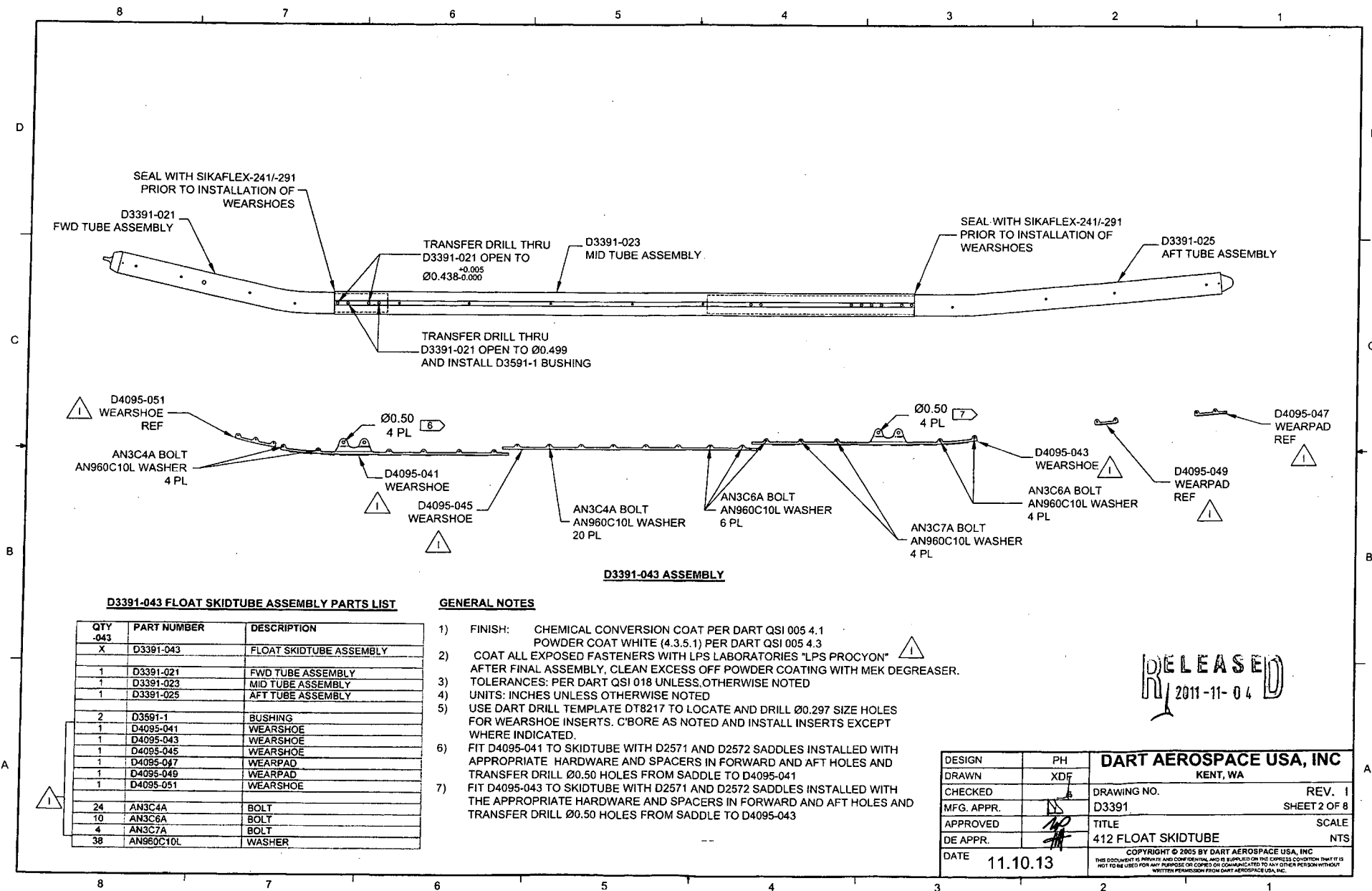
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

77377



| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

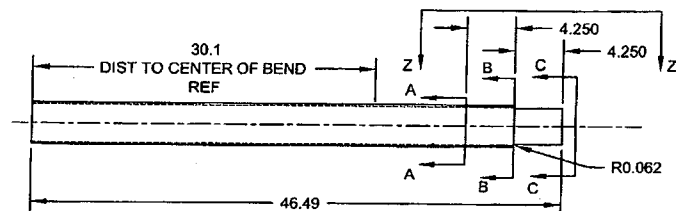
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

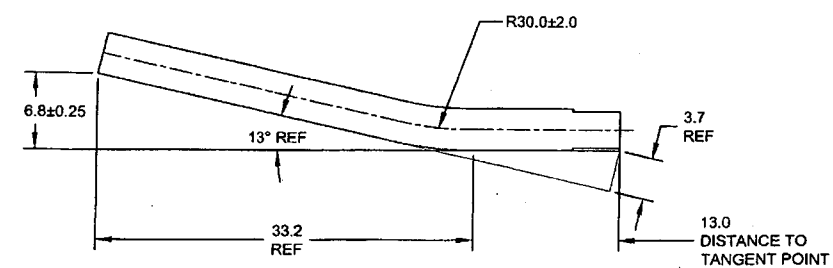
| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
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**NOTE:** Date & initial all entries

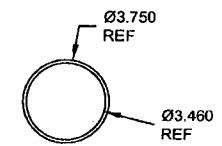
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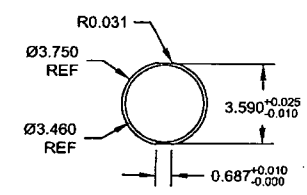
**D3391-1 CUTTING DETAIL**  
(MAKE FROM D6013-047 SKIDTUBE MATERIAL)



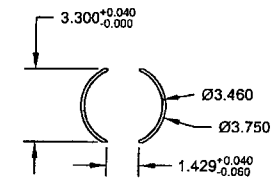
**D3391-011/-021 BENDING DETAIL**  
(MAKE FROM D3391-1)



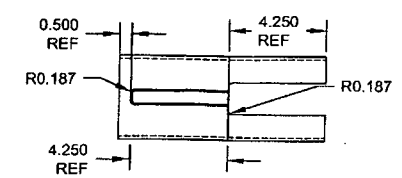
**SECTION A-A**  
SCALE 2X



**SECTION B-B**  
SCALE 2X



**SECTION C-C**  
SCALE 2X



**VIEW Z-Z**  
SCALE 2X

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| CHECKED    |          | DRAWING NO.  | REV. 1       |
| MFG. APPR. |          | D3391  | SHEET 3 OF 8 |
| APPROVED   |          | TITLE  | SCALE        |
| DE APPR.   |          | 412 FLOAT SKIDTUBE   | NTS          |
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| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

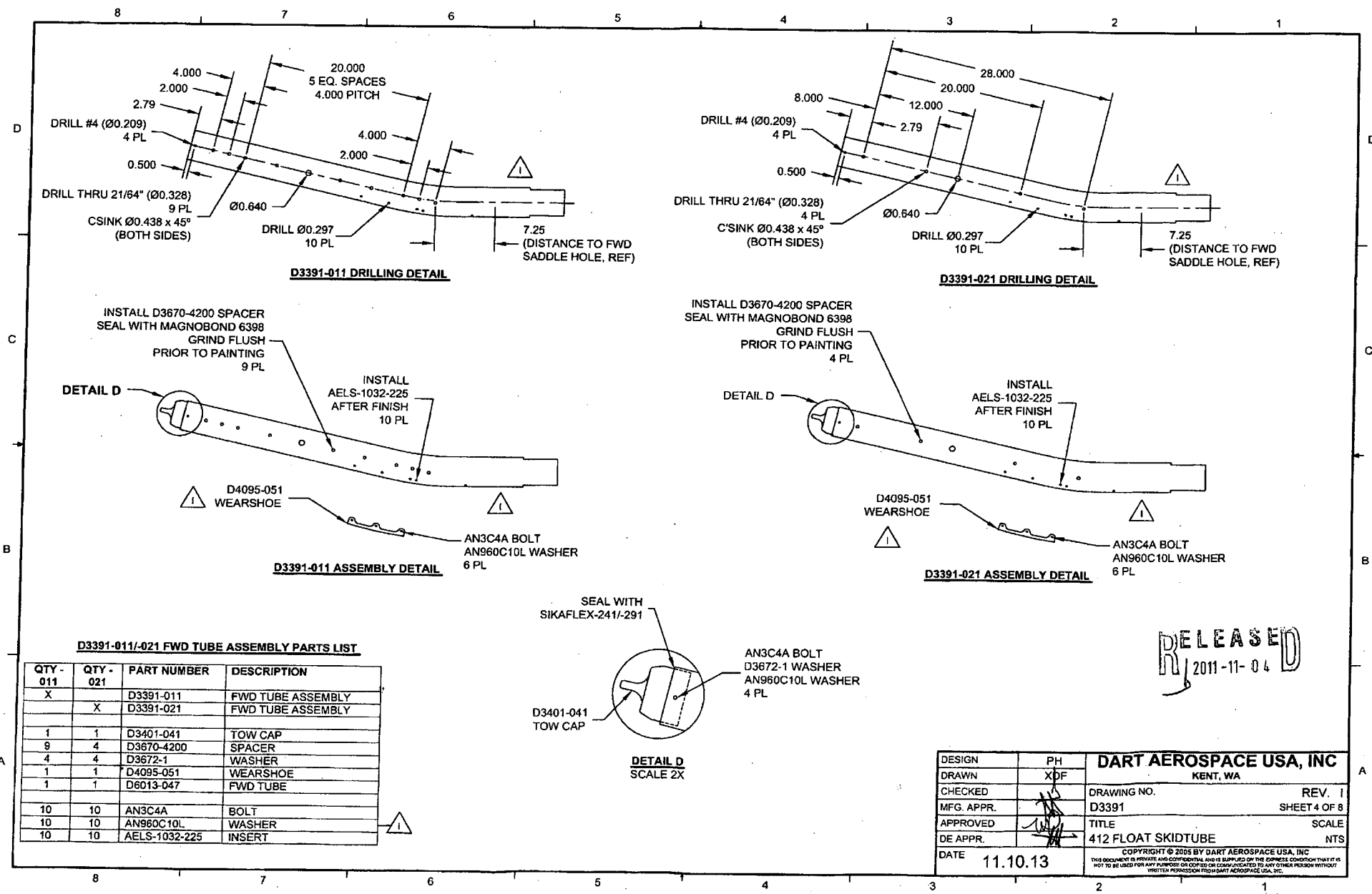
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| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
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| MFG. APPR. |  |          | D3391  | SHEET 4 OF 8 |
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| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
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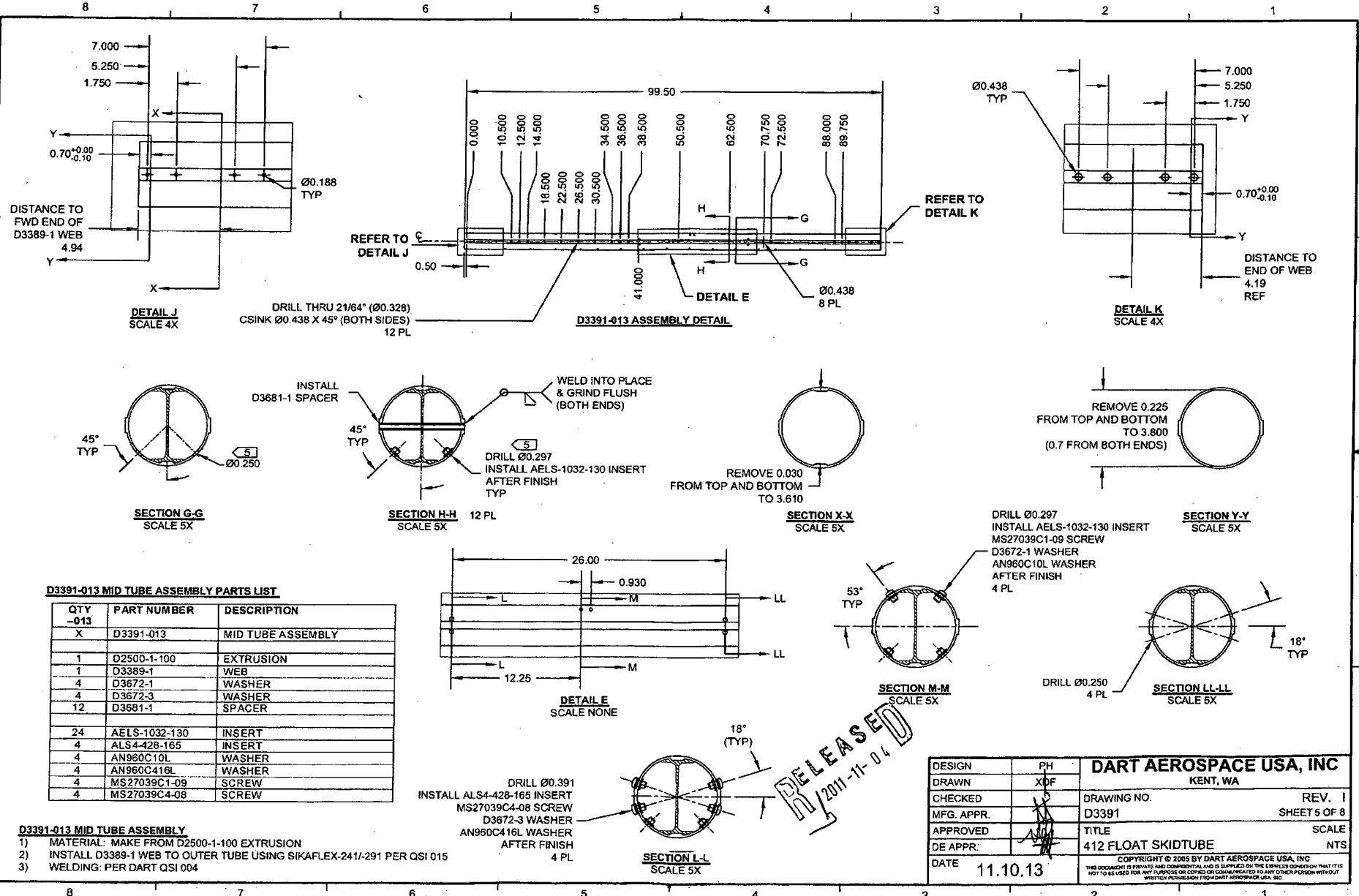
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Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
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|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
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| CHECKED    |          | DRAWING NO.  | REV. 1       |
| MFG. APPR. |          | D3391  | SHEET 5 OF 8 |
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|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
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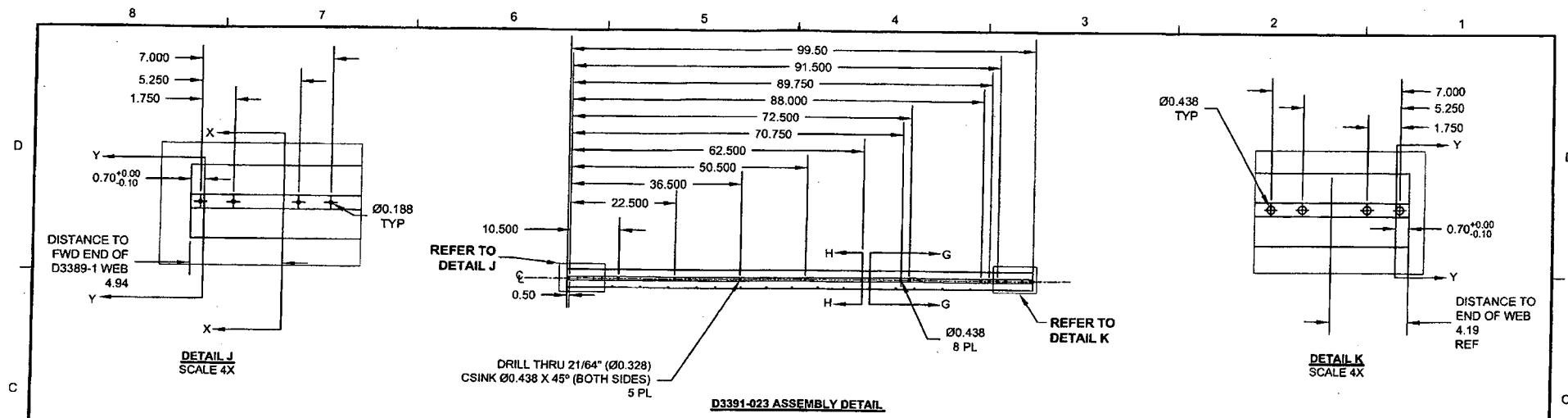
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Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

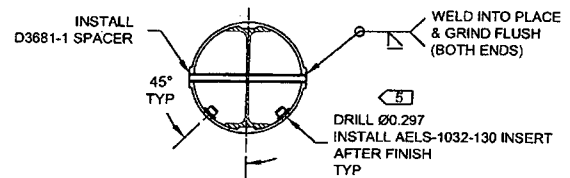
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|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
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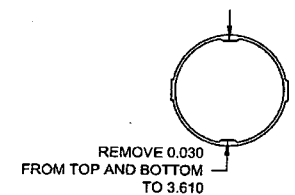
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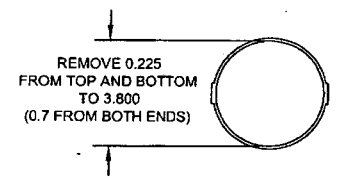
SECTION G-G  
SCALE 5X



SECTION H-H  
SCALE 5X



SECTION X-X  
SCALE 5X



SECTION Y-Y  
SCALE 5X

**D3391-023 MID TUBE ASSEMBLY PARTS LIST**

| QTY - 023 | PART NUMBER   | DESCRIPTION       |
|-----------|---------------|-------------------|
| X         | D3391-023     | MID TUBE ASSEMBLY |
| 1         | D2500-1-100   | EXTRUSION         |
| 1         | D3389-1       | WEB               |
| 5         | D3681-1       | SPACER            |
| 20        | AELS-1032-130 | INSERT            |

**D3391-023 MID TUBE ASSEMBLY**

- 1) MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
- 2) INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/-291 PER QSI 015
- 3) WELDING: PER DART QSI 004

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| DRAWN      | XDF      | KENT, WA   |              |
| CHECKED    |          | DRAWING NO.  | REV. 1       |
| MFG. APPR. |          | D3391  | SHEET 6 OF 8 |
| APPROVED   |          | TITLE  | SCALE        |
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| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
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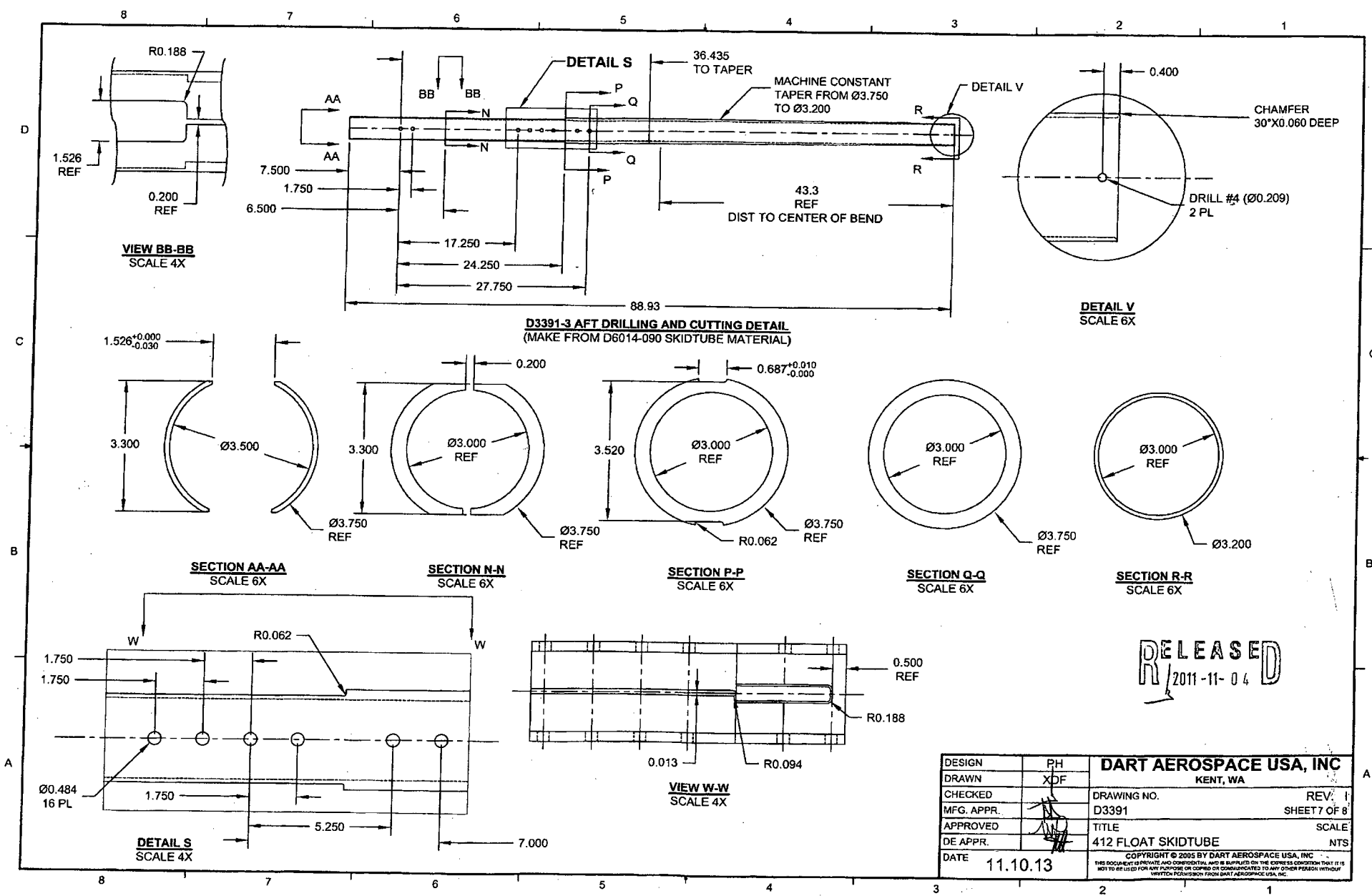
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
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| DRAWN      | XDF      | KENT, WA   |              |
| CHECKED    |          | DRAWING NO.  | REV. I       |
| MFG. APPR. |          | D3391  | SHEET 7 OF 8 |
| APPROVED   |          | TITLE  | SCALE        |
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| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date:~ \_\_\_\_\_

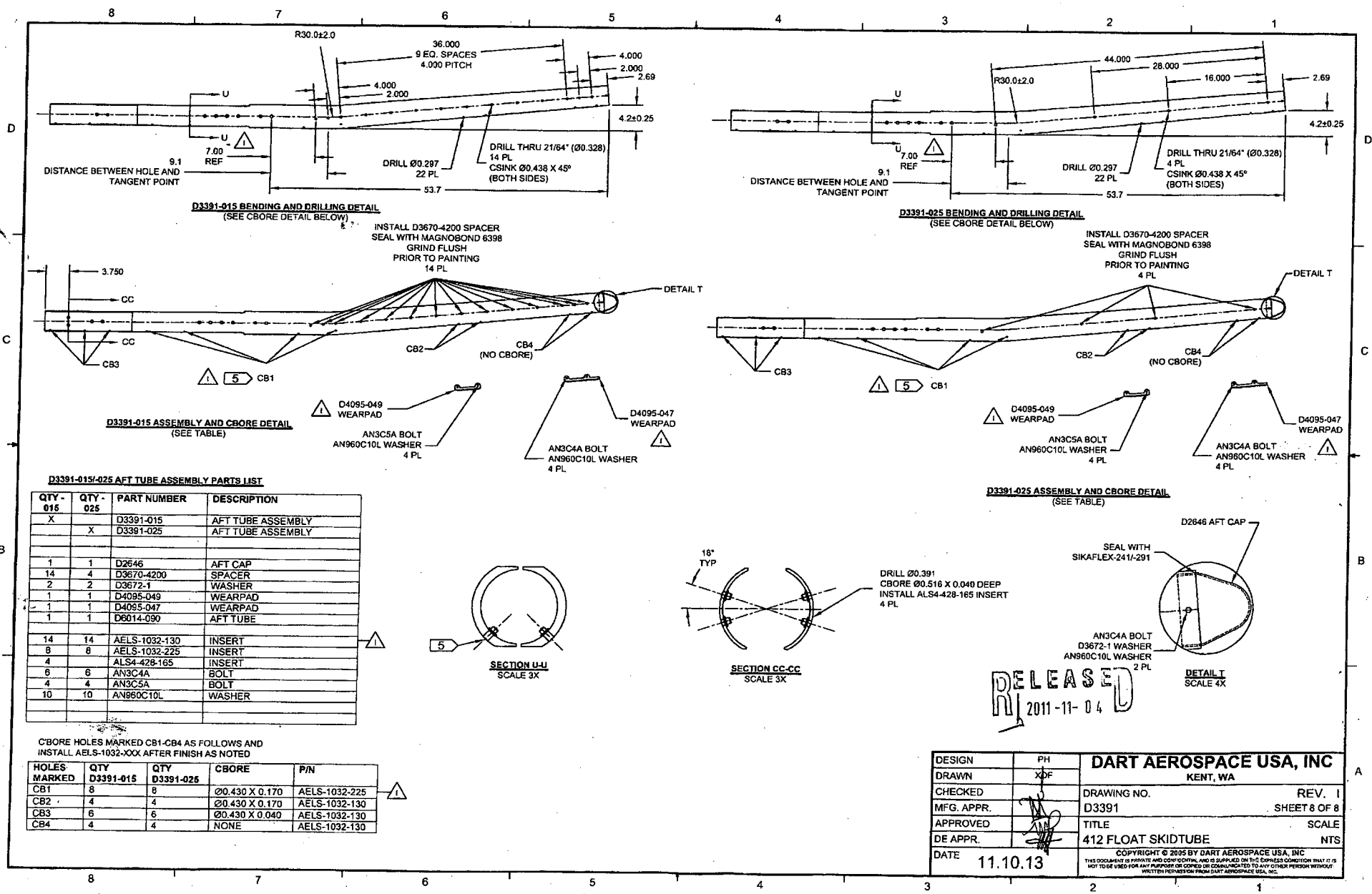
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
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| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
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**NOTE:** Date & initial all entries



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**D3391-015/025 AFT TUBE ASSEMBLY PARTS LIST**

| QTY - 015 | QTY - 025 | PART NUMBER   | DESCRIPTION       |
|-----------|-----------|---------------|-------------------|
| X         | X         | D3391-015     | AFT TUBE ASSEMBLY |
|           | X         | D3391-025     | AFT TUBE ASSEMBLY |
| 1         | 1         | D2646         | AFT CAP           |
| 14        | 4         | D3670-4200    | SPACER            |
| 2         | 2         | D3672-1       | WASHER            |
| 1         | 1         | D4095-049     | WEARPAD           |
| 1         | 1         | D4095-047     | WEARPAD           |
| 1         | 1         | D6014-090     | AFT TUBE          |
| 14        | 14        | AELS-1032-130 | INSERT            |
| 8         | 8         | AELS-1032-225 | INSERT            |
| 4         | 4         | ALS4-428-165  | INSERT            |
| 6         | 6         | AN3C4A        | BOLT              |
| 4         | 4         | AN3C5A        | BOLT              |
| 10        | 10        | AN960C10L     | WASHER            |

CBORE HOLES MARKED CB1-CB4 AS FOLLOWS AND INSTALL AELS-1032-XXX AFTER FINISH AS NOTED

| HOLES MARKED | QTY | D3391-015 | QTY | D3391-025 | CBORE          | P/N           |
|--------------|-----|-----------|-----|-----------|----------------|---------------|
| CB1          | 8   |           | 8   |           | Ø0.430 X 0.170 | AELS-1032-225 |
| CB2          | 4   |           | 4   |           | Ø0.430 X 0.170 | AELS-1032-130 |
| CB3          | 6   |           | 6   |           | Ø0.430 X 0.040 | AELS-1032-130 |
| CB4          | 4   |           | 4   |           | NONE           | AELS-1032-130 |

|                              |     |   |
|------------------------------|-----|---|
| DESIGN                       | PH  | <b>DART AEROSPACE USA, INC</b><br>KENT, WA<br>DRAWING NO. <b>D3391</b><br>TITLE <b>412 FLOAT SKIDTUBE</b><br>DATE <b>11.10.13</b> |
| DRAWN                        | XDF |   |
| CHECKED                      |     |   |
| MFG. APPR.                   |     |   |
| DE APPR.                     |     |   |
| SHEET 8 OF 8<br>SCALE<br>NTS |     |   |

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|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
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|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
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**NOTE:** Date & initial all entries